



Tropical Depression EIGHT QuickLook Posted: 00:00 EDT 08/31/2016

NOAA and NOAA Partnership Stations Relative to the Storm Chesapeake Bay Bridge Tunnel, VA Sewells Point, VA Duck, NC Oregon Inlet Marina, NC **USCG Station Hatteras, NC** Beaufort, NC Wilmington, NC Wrightsville Beach, NC Active Stations

Storm Analysis

As of 08/31/2016 00:00 EDT, water levels at most stations from North Carolina to the entrance of the Chesapeake Bay are less elevated and are returning to normal tide levels. Water level at Duck, NC and Wrightsville Beach, NC are currently 0.5 ft about predicted tide levels. Winds generally range from 3-15 knots, with gusts up to 18 knots. Barometric pressure remains steady across the region.

Water Level and Meteorological plots available below are updated automatically. A line denoting <u>Mean Higher High Water</u> (MHHW) is displayed to provide an approximate indication of when flooding inundation may occur.

For additional data, please see the <u>Center for Operational Oceanographic Products & Services</u> website. For more information or archived products and reports, please see the <u>Storm QuickLook</u> Homepage.

No further QuickLooks will be posted for this storm unless oceanographic conditions warrant and/or the National Hurricane Center (NHC) issues a new Tropical Storm Warning for the U.S. (or U.S. Territories) Coastline.

Analyst: LBA

SELECT NATIONAL HURRICANE CENTER ADVISORY INFORMATION:

BULLETIN

TROPICAL DEPRESSION EIGHT ADVISORY NUMBER 11 NWS NATIONAL HURRICANE CENTER MIAMI FL AL082016 1100 PM EDT TUE AUG 30 2016

...DEPRESSION MOVING NORTHEASTWARD AWAY FROM THE NORTH CAROLINA COAST...

SUMMARY OF 1100 PM EDT...0300 UTC...INFORMATION

LOCATION...34.5N 74.6W
ABOUT 70 MI...115 KM SE OF CAPE HATTERAS NORTH CAROLINA
MAXIMUM SUSTAINED WINDS...35 MPH...55 KM/H
PRESENT MOVEMENT...NE OR 40 DEGREES AT 5 MPH...7 KM/H
MINIMUM CENTRAL PRESSURE...1011 MB...29.86 INCHES

WATCHES AND WARNINGS

There are no coastal watches or warnings in effect.

DISCUSSION AND 48-HOUR OUTLOOK

At 1100 PM EDT (0300 UTC), the center of Tropical Depression Eight was located near latitude 34.5 North, longitude 74.6 West. The depression is moving toward the northeast near 5 mph (7 km/h). A northeastward and then east-northeastward motion with an increase in forward speed is expected during the next couple of days. On the forecast track, the depression will continue to move away from the coast of North Carolina.

Data from an Air Force Reserve Hurricane Hunter aircraft indicate that maximum sustained winds remain near 35 mph (55 km/h) with

higher gusts. Some strengthening is forecast during the next 48 hours, and the depression could become a tropical storm on Wednesday.

The estimated minimum central pressure is 1011 mb (29.86 inches).

HAZARDS AFFECTING LAND

None.

NEXT ADVISORY

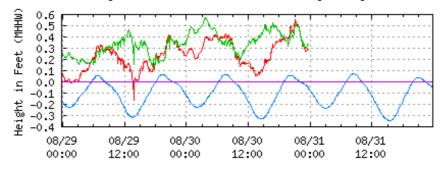
Next complete advisory at 500 AM EDT.

Forecaster Berg

For the purpose of timely release, data contained within this QuickLook have undergone a "limited" NOS Quality Assurance/Control; however, the data have not yet undergone final verification. All data subject to NOS verification.

Jump to: <u>USCG Station Hatteras - Water Level</u>, <u>USCG Station Hatteras - Winds</u>, <u>USCG Station Hatteras - Barometric</u>, <u>Oregon Inlet Marina - Water Level</u>, <u>Oregon Inlet Marina - Winds</u>, <u>Oregon Inlet Marina - Barometric</u>, <u>Duck - Water Level</u>, <u>Duck - Winds</u>, <u>Duck - Barometric</u>, <u>Chesapeake Bay Bridge Tunnel - Water Level</u>, <u>Chesapeake Bay Bridge Tunnel - Water Level</u>, <u>Sewells Point - Barometric</u>, <u>Sewells Point - Barometric</u>, <u>Beaufort - Water Level</u>, <u>Beaufort - Winds</u>, <u>Beaufort - Barometric</u>, <u>Wrightsville Beach - Water Level</u>, <u>Wilmington - Water Level</u>, <u>Wilmington - Barometric</u>

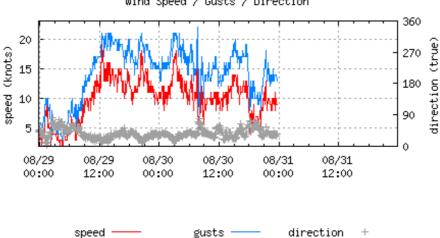
NOAA/NOS/CO-OPS <u>8654467 USCG Station Hatters</u>, <u>NC</u> Preliminary Water Level, relative to Mean Higher High Water(MHHW)



Predicted Tide — (Obs-Pred) — Observed WL — MHHW —

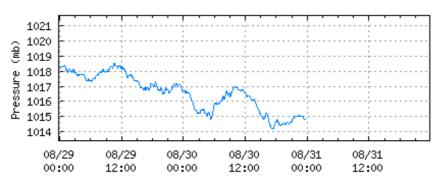
Last Observed Sample: 08/30/2016 23:36 (EDT). Data relative to MHHW Observed: 0.29 ft. Predicted: -0.05 ft. Residual: 0.34 ft. Historical Maximum Water Level: Oct 29 2012, 4.02 ft. Next High Tide: 08/31/2016 08:24 (EDT), 0.07 ft.

NOAA/NOS/CO-OPS <u>8654467 USCG Station Hatteras</u>, <u>NC</u> Wind Speed / Gusts / Direction



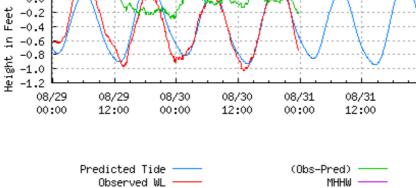
Last Observed Sample: 08/30/2016 23:36 (EDT) Wind Speed: 9 knots Gusts: 13 knots Direction: 34° T

NOAA/NOS/CO-OPS <u>8654467 USCG Station Hatteras</u>, <u>NC</u> Barometric Pressure



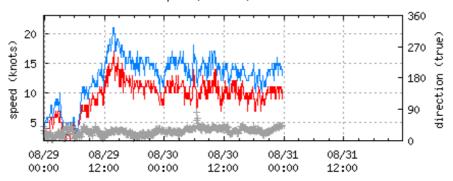
barometric pressure ——
Last Observed Sample: 08/30/2016 23:36 (EDT)
Barometric Pressure: 1014.8 mb

NOAA/NOS/CO-OPS 8652587 Oregon Inlet Marina, NC Preliminary Water Level, relative to Mean Higher High Water(MHHW) 0.4 0.2 0.0 -0.2 -0.4 -0.6 -0.8



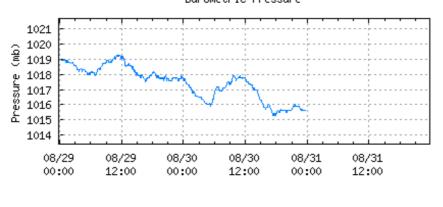
Last Observed Sample: 08/30/2016 23:42 (EDT). Data relative to MHHW Observed: -0.74 ft. Predicted: -0.54 ft. Residual: -0.20 ft. Historical Maximum Water Level: Aug 28 2011, 6.32 ft. Next High Tide: 08/31/2016 07:53 (EDT), 0.11 ft.

NOAA/NOS/CO-OPS <u>8652587 Oregon Inlet Marina, NC</u> Wind Speed / Gusts / Direction



speed — gusts — direction + Last Observed Sample: 08/30/2016 23:42 (EDT) Wind Speed: 9 knots Gusts: 13 knots Direction: 43° T

NOAA/NOS/CO-OPS <u>8652587 Oregon Inlet Marina</u>, NC Barometric Pressure

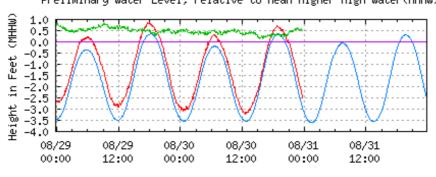


barometric pressure ----

Last Observed Sample: 08/30/2016 23:42 (EDT)

Barometric Pressure: 1015.6 mb

NOAA/NOS/CO-OPS <u>8651370 Duck, NC</u> Preliminary Water Level, relative to Mean Higher High Water(MHHW)

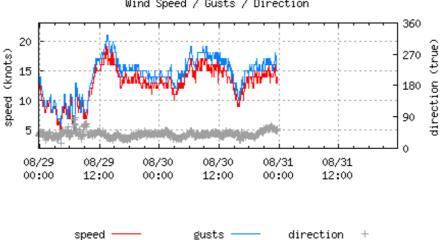


Predicted Tide —— (Obs-Pred) —
Observed WL —— MHHW —

Last Observed Sample: 08/30/2016 23:42 (EDT). Data relative to MHHW Observed: -2.50 ft. Predicted: -2.98 ft. Residual: 0.48 ft.

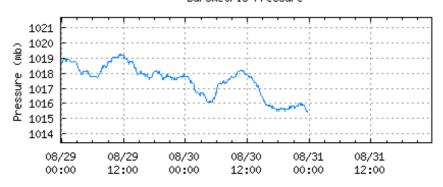
Historical Maximum Water Level: Sep 18 2003, 4.13 ft. Next High Tide: 08/31/2016 07:26 (EDT), -0.06 ft.

NOAA/NOS/CO-OPS 8651370 Duck, NC Wind Speed / Gusts / Direction



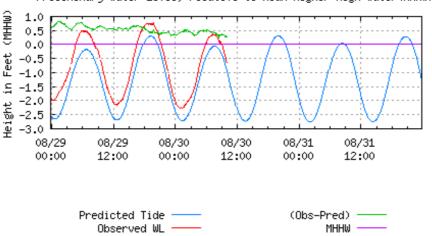
Last Observed Sample: 08/30/2016 23:42 (EDT) Wind Speed: 13 knots Gusts: 15 knots Direction: 55° T

NOAA/NOS/CO-OPS <u>8651370 Duck</u>, <u>NC</u> Barometric Pressure



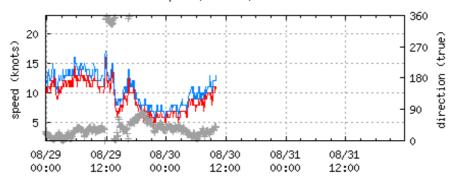
barometric pressure ——
Last Observed Sample: 08/30/2016 23:42 (EDT)
Barometric Pressure: 1015.4 mb

NOAA/NOS/CO-OPS <u>8638863 Chesapeake Bay Bridge Tunnel, VA</u> Preliminary Water Level, relative to Mean Higher High Water(MHHW)



Last Observed Sample: 08/30/2016 10:00 (EDT). Data relative to MHHW Observed: -0.65 ft. Predicted: -0.94 ft. Residual: 0.29 ft. Historical Maximum Water Level: Nov 12 2009, 4.66 ft. Next High Tide: 08/30/2016 19:59 (EDT), 0.31 ft.

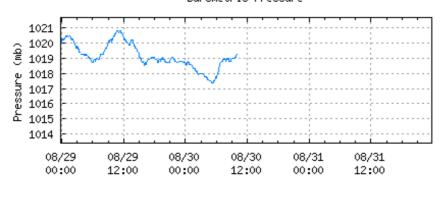
NOAA/NOS/CO-OPS $\underline{8638863\ Chesapeake\ Bay\ Bridge\ Tunnel,\ VA}$ Wind Speed / Gusts / Direction



speed gusts direction + Last Observed Sample: 08/30/2016 10:00 (EDT)

Wind Speed: 11 knots Gusts: 13 knots Direction: 42° T

NOAA/NOS/CO-OPS <u>8638863 Chesapeake Bay Bridge Tunnel, VA</u> Barometric Pressure

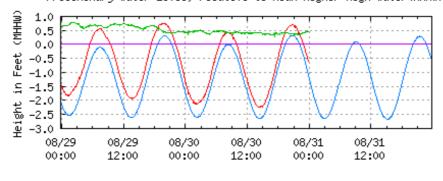


barometric pressure ----

Last Observed Sample: 08/30/2016 10:00 (EDT)

Barometric Pressure: 1019.3 mb

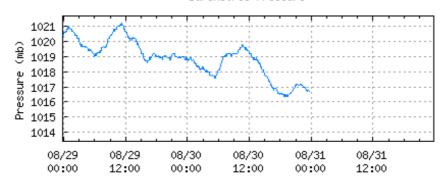
$NOAA/NOS/CO-OPS ~\underbrace{8638610~Sewells~Point,~VA}_{Preliminary~Water~Level,~relative~to~Mean~Higher~High~Water(MHHW)}$



Predicted Tide —— (Obs-Pred)
Observed WL —— MHHW

Last Observed Sample: 08/30/2016 23:48 (EDT). Data relative to MHHW Observed: -0.59 ft. Predicted: -1.06 ft. Residual: 0.47 ft. Historical Maximum Water Level: Aug 23 1933, 5.26 ft. Next High Tide: 08/31/2016 09:07 (EDT), 0.09 ft.

NOAA/NOS/CO-OPS <u>8638610 Sewells Point, VA</u> Barometric Pressure

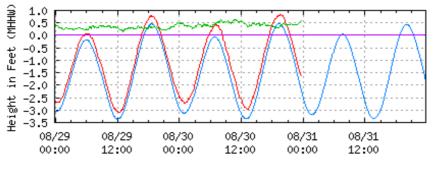


barometric pressure ----

Last Observed Sample: 08/30/2016 23:48 (EDT)

Barometric Pressure: 1016.7 mb

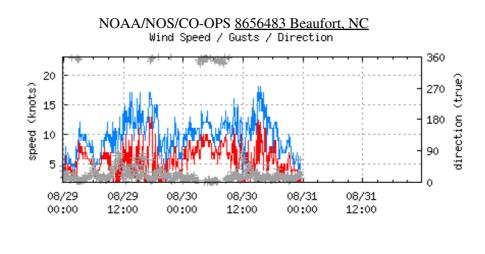
$NOAA/NOS/CO-OPS~\underbrace{8656483~Beaufort, NC}_{Preliminary~Water~Level,~relative~to~Mean~Higher~High~Water(MHHW)}$



Predicted Tide _____ (Obs-Pred) _____ Observed WL ____ MHHW ____

Last Observed Sample: 08/30/2016 23:36 (EDT). Data relative to MHHW Observed: -1.63 ft. Predicted: -2.21 ft. Residual: 0.58 ft. Historical Maximum Water Level: Sep 14 2005, 3.01 ft.

Next High Tide: 08/31/2016 07:39 (EDT), 0.05 ft.



Last Observed Sample: 08/30/2016 23:36 (EDT) Wind Speed: 3 knots Gusts: 3 knots Direction: 13° T

gusts

speed

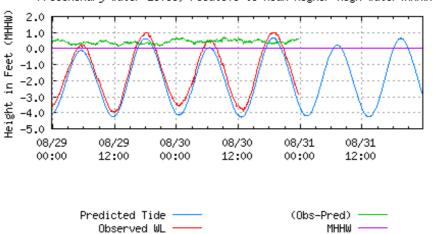
direction

NOAA/NOS/CO-OPS 8656483 Beaufort, NC Barometric Pressure



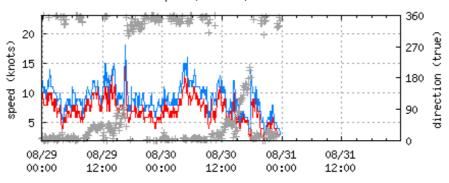
barometric pressure Last Observed Sample: 08/30/2016 23:36 (EDT) Barometric Pressure: 1015.1 mb

NOAA/NOS/CO-OPS 8658163 Wrightsville Beach, NC Preliminary Water Level, relative to Mean Higher High Water(MHHW)



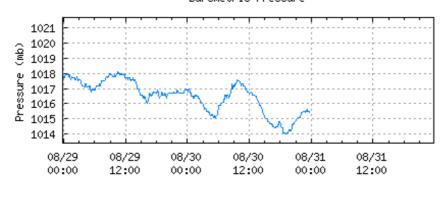
Last Observed Sample: 08/30/2016 23:42 (EDT). Data relative to MHHW Observed: -2.82 ft. Predicted: -3.44 ft. Residual: 0.62 ft. Historical Maximum Water Level: Sep 25 2008, 2.81 ft. Next High Tide: 08/31/2016 07:11 (EDT), 0.21 ft.

$\begin{array}{c} NOAA/NOS/CO\text{-}OPS \ \underline{8658163 \ Wrightsville \ Beach, NC} \\ \text{Wind Speed} \ / \ \text{Gusts} \ / \ \text{Direction} \end{array}$



speed — gusts — direction + Last Observed Sample: 08/30/2016 23:42 (EDT) Wind Speed: 3 knots Gusts: 3 knots Direction: 346° T

NOAA/NOS/CO-OPS <u>8658163 Wrightsville Beach, NC</u> Barometric Pressure

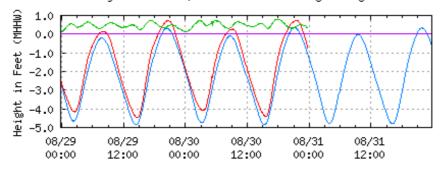


barometric pressure ----

Last Observed Sample: 08/30/2016 23:42 (EDT)

Barometric Pressure: 1015.4 mb

NOAA/NOS/CO-OPS <u>8658120 Wilmington, NC</u> Preliminary Water Level, relative to Mean Higher High Water(MHHW)

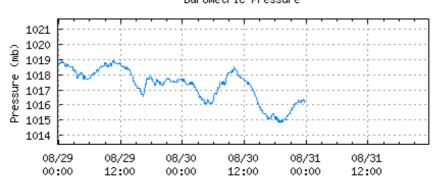


Predicted Tide —— (Obs-Pred)
Observed WL —— MHHW

Last Observed Sample: 08/30/2016 23:42 (EDT). Data relative to MHHW Observed: -0.72 ft. Predicted: -1.08 ft. Residual: 0.36 ft. Historical Maximum Water Level: Oct 15 1954, 3.47 ft.

Next High Tide: 08/31/2016 09:31 (EDT), -0.02 ft.

NOAA/NOS/CO-OPS <u>8658120 Wilmington, NC</u> Barometric Pressure



barometric pressure ----

Last Observed Sample: 08/30/2016 23:42 (EDT)
Barometric Pressure: 1016.2 mb

Latest Water Level Observations on MHHW

Station II	Station Name	Date/Time	Observed Water Level	Predicted Tide	Residual Water Level	24 Hour Maximum Storm Tide
8654467	USCG Station Hatteras, NC	08/30/2016 23:36 (EDT)	0.29 ft	-0.05 ft	0.34 ft	0.55 ft
8652587	Oregon Inlet Marina, NC	08/30/2016 23:42 (EDT)	-0.74 ft	-0.54 ft	-0.20 ft	0.21 ft
8651370	Duck, NC	08/30/2016 23:42 (EDT)	-2.50 ft	-2.98 ft	0.48 ft	0.71 ft
8638863	Chesapeake Bay Bridge Tunnel, VA	08/30/2016 10:00 (EDT)	-0.65 ft	-0.94 ft	0.29 ft	0.77 ft
8638610	Sewells Point, VA	08/30/2016 23:48 (EDT)	-0.59 ft	-1.06 ft	0.47 ft	0.69 ft
8656483	Beaufort, NC	08/30/2016 23:36 (EDT)	-1.63 ft	-2.21 ft	0.58 ft	0.84 ft
8658163	Wrightsville Beach, NC	08/30/2016 23:42 (EDT)	-2.82 ft	-3.44 ft	0.62 ft	1.01 ft
8658120	Wilmington, NC	08/30/2016 23:42 (EDT)	-0.72 ft	-1.08 ft	0.36 ft	0.74 ft

Center for Operational Oceanographic Products & Services (CO-OPS) | National Ocean Service (NOS) National Oceanic and Atmospheric Administration | U.S. Department of Commerce